

Name: _____

Date: _____

FOIL when $A \neq 1$ solution (version 11)

FOIL the expressions shown below:

1. $(3x - 8)(2x - 2)$

$$\begin{aligned} & (3)(2)x^2 + (3)(-2)x + (-8)(2)x + (-8)(-2) \\ & (6)x^2 + (-6)x + (-16)x + (16) \\ & 6x^2 - 22x + 16 \end{aligned}$$

2. $(-4x + 5)(-5x - 4)$

$$\begin{aligned} & (-4)(-5)x^2 + (-4)(-4)x + (5)(-5)x + (5)(-4) \\ & (20)x^2 + (16)x + (-25)x + (-20) \\ & 20x^2 - 9x - 20 \end{aligned}$$

3. $(4x - 7)(-5x + 6)$

$$\begin{aligned} & (4)(-5)x^2 + (4)(6)x + (-7)(-5)x + (-7)(6) \\ & (-20)x^2 + (24)x + (35)x + (-42) \\ & -20x^2 + 59x - 42 \end{aligned}$$

4. $(-2x + 8)(-3x + 8)$

$$\begin{aligned} & (-2)(-3)x^2 + (-2)(8)x + (8)(-3)x + (8)(8) \\ & (6)x^2 + (-16)x + (-24)x + (64) \\ & 6x^2 - 40x + 64 \end{aligned}$$

5. $(4x + 5)(6x - 8)$

$$\begin{aligned} & (4)(6)x^2 + (4)(-8)x + (5)(6)x + (5)(-8) \\ & (24)x^2 + (-32)x + (30)x + (-40) \\ & 24x^2 - 2x - 40 \end{aligned}$$

FOIL the expressions shown below:

6. $(4x + 3)(2x - 8)$

$$\begin{aligned}(4)(2)x^2 + (4)(-8)x + (3)(2)x + (3)(-8) \\ (8)x^2 + (-32)x + (6)x + (-24) \\ 8x^2 - 26x - 24\end{aligned}$$

7. $(-6x + 5)(2x - 3)$

$$\begin{aligned}(-6)(2)x^2 + (-6)(-3)x + (5)(2)x + (5)(-3) \\ (-12)x^2 + (18)x + (10)x + (-15) \\ -12x^2 + 28x - 15\end{aligned}$$

8. $(-5x - 8)(-6x + 7)$

$$\begin{aligned}(-5)(-6)x^2 + (-5)(7)x + (-8)(-6)x + (-8)(7) \\ (30)x^2 + (-35)x + (48)x + (-56) \\ 30x^2 + 13x - 56\end{aligned}$$

9. $(6x - 8)(7x + 5)$

$$\begin{aligned}(6)(7)x^2 + (6)(5)x + (-8)(7)x + (-8)(5) \\ (42)x^2 + (30)x + (-56)x + (-40) \\ 42x^2 - 26x - 40\end{aligned}$$

10. $(-4x + 4)(5x + 7)$

$$\begin{aligned}(-4)(5)x^2 + (-4)(7)x + (4)(5)x + (4)(7) \\ (-20)x^2 + (-28)x + (20)x + (28) \\ -20x^2 - 8x + 28\end{aligned}$$